Author’s response to reviews

Title: MR imaging features of benign retroperitoneal paragangliomas and schwannomas

Authors:
yanguang shen (shenyanguang@163.com)
Yan Zhong (c302643187c@163.com)
Haiyi Wang (302643187@qq.com)
Lu Ma (b302643187b@163.com)
Yingwei Wang (a32643187a@163.com)
Kun Zhang (bbb7691188@qq.com)
Zhonghua Sun (Z.Sun@exchange.curtin.edu.au)
Huiyi Ye (13701100368@163.com)

Version: 2 Date: 09 Oct 2017

Author’s response to reviews:
Dear Editor,

Re: NURL-D-17-00108R1

MR imaging features of benign retroperitoneal paragangliomas and schwannomas

We thank the reviewers and editors for their constructive comments and suggestions to improve our manuscript. Please find enclosed a revised manuscript with this covering letter documenting all actions as requested by the reviewers and editors.

Response to reviewer’s and Editorial Board Member comments:

REVIEWER 1
For my second question, as all imaging features are based on tumor pathology, is there any relationship between imaging features and pathological findings? What's difference between
these two tumors. This is quite important when analyzing and describing the imaging features. This part should be addressed more.

Response: Thank you for insightful comments and valuable suggestions. We have revised the manuscript in the “Line 292-304, 442-447”.

(1) The typical histology of paraganglioma shows that tumor cells are clustered in honeycomb or nests patterns (Zellballen), which are separated by broad bands of fibrous tissue with prominent vascularization and argyrophilic fibers. The paragangliomas are characteristically highly vascular neoplasms, have an abundant capillary network, and may have precarious microcirculation because of high levels of tissue vasoconstrictor substances. These characteristics can cause a spontaneous massive intratumoral hemorrhage and necrotic degeneration, and exhibits marked and early enhancement in DCE-MRI. Sahdev A. et al. reported necrotic change was observed in more than 70% of retroperitoneal extra-adrenal paragangliomas in their study and tended to occur as paragangliomas increased in size. (2) Cystic changes are noted more commonly in retroperitoneal schwannomas than in other retroperitoneal tumors. On schwannoma histopathological examination, two main microscopic patterns could be recognized: A highly cellular component (Antoni A area) and a myxoid component (Antoni B area). The predominance of one or the other reflects the heterogeneous findings at radiological investigation. Many theories attempt to explain the degeneration cystic schwannoma. One theory involves the degeneration of Antoni B areas leading to cyst formation, while progressing in size; another theory holds that with increasing tumor central ischemic necrosis occurs that causes cysts within the tumor.

Thus, the answer to your question is Yes, there exists relationship between imaging features and pathological findings.

REVIEWER 2

The authors addressed some of my concerns.

Response: Thank you for your positive comments.

Editor Comments:

1. Ethics approval and consent to participate
It is stated that 'No ethics committee approval was needed for this systematic review'. This statement is not valid as your manuscript is a research article instead of systematic review. Please revise accordingly.
Response: Thank you for comment. We have revised the manuscript in the “Line 380-381”.

2. Authors' contributions
Please list all the authors with the initials in this section. Please also ensure that all authors have read and approved the final version and add a statement confirming this. For example: ‘AB carried out the molecular genetic studies, participated in the sequence alignment and drafted the manuscript. BC participated in the design of the study, carried out immunoassays and performed the statistical analysis. CD conceived of the study, and participated in its design and coordination. All authors read and approved the final manuscript.
Response:. We have revised the manuscript in the “Line 370-373” as suggested.

3. Please move the below sentence from Acknowledgement to Funding
'This study was supported by grants from the National Natural Science Foundation of China (No. 81471641) and the Health Care Special Project (14BJZ02). The funders took no part in the study design, data collection and analysis, decision to publish, or preparation of the manuscript.'
Response:.We have revised the manuscript in the “Line 362-365” as suggested.

4. Figures
It is noticed the identifying information was shown from the legends of Figure 1 and Figure 2
'Figure 1 A 67-year-old man
Figure 2 A 38-year-old asymptomatic woman'
It is BMC policy to not publish more than 2 indirect identifiers without explicit consent for publication from the participants, as per this paper (http://trialsjournal.biomedcentral.com/articles/10.1186/1745-6215-11-9).
Please do not indicate the sex and the exact age information as you didn't obtain the Consent to Publish from the patients. You may want to use 'a patient (age: 60-69)' and 'a patient (age: 30-39)' instead of 'a 67-year-old man' and 'a 38-year-old woman' in the figure legends. Please read
the above paper carefully and make sure your manuscript will not compromise patients' anonymity.
Response: Thank you for valuable suggestions. We have revised the manuscript in the “Line 478, 491”.

5. Please remove the below two files from the file inventory as they are for peer review and not necessary at this stage of submission
   -Nature Research Editing Service Certification.pdf
   -Cover letter.docx
Response: Thank you for suggestions. We have removed the files.

6. Upon resubmission, Please remove any tracked changes or highlighting and include only a single clean copy of the manuscript. Please ensure the document is in the final form for publication; please upload only files that are to be published. If you wish to respond to these revision requests, please insert the information in to the designated input box only
Response: Thank you for suggestions. We have resubmitted a single clean copy of the revision manuscript.

I hope we have addressed these comments satisfactorily. Please do not hesitate to contact me if you need any further information.

Yours sincerely
Huiyi Ye